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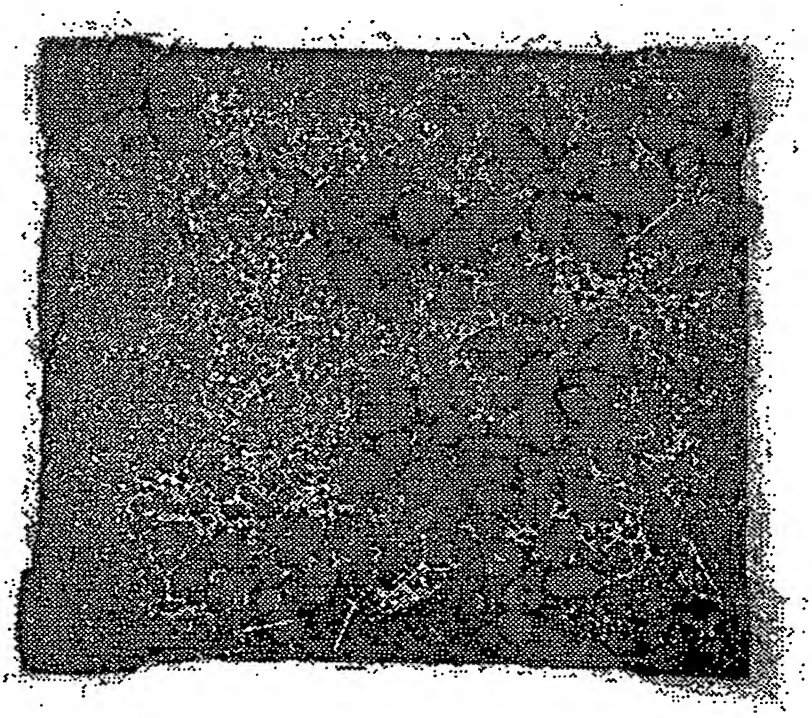
(54) Title: NOVEL POLYPEPTIDE HAVING FUNCTION OF 7-KETO-8-AMINOPELARGONIC ACID SYNTHASE OF PLANT AND METHOD FOR INDUCING GROWTH INHIBITION AND LETHALITY BY SUPPRESSING EXPRESSION OF THE POLYPEPTIDE



(57) Abstract: The invention relates to a novel polypeptide participating in biotin biosynthesis of plant, a polynucleotide encoding the said polypeptide, a method for inducing plant growth inhibition by suppressing the expression or function of the said polypeptide, resulting in inhibition of biotin biosynthesis, and a method for identifying herbicidal compounds that inhibit the expression or function of the said polypeptide. Biotin biosynthesis is an essential process for the growth of plants, however, the process is not present in both human and animals. Therefore, the compounds suppressing the expression or function of the novel polypeptide that relates to biotin biosynthesis can be effectively used as a new herbicide doing human and animals no harm.

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